

AH200

Laney
POWER TO THE MUSIC

USER MANUAL

IMPORTANT SAFETY INSTRUCTIONS

WARNING: When using electric products, basic cautions should always be followed, including the following.

1. Read all safety and operating instructions before using this product
2. The product should be powered by a three pin 'grounded' (or earthed) plug connected to a power socket with a grounded earth outlet.
3. All safety and operating instructions should be retained for future reference
4. Obey all cautions in the Operating instructions and on the back of the unit
5. All operating instructions should be followed
6. This product should not be used near water, i.e. a bathtub, sink, swimming pool, wet basement, etc.
7. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built up enclosure that will impede the flow of cooling air.
8. This product should not be placed near a source of heat such as stove, radiator, or another heat producing amplifier.
9. Connect only to a power supply of the type marker on the unit adjacent to the power supply cord.
10. Never break off the ground pin on a power supply cord.
11. Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the chord exits the unit.
12. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
13. If this product is to be mounted in an equipment rack, rear support should be provided.
14. The user should allow easy access to any mains plug, mains coupler and mains switch used in conjunction with this unit thus making it readily operable.
15. Metal parts can be cleaned with a damp cloth. The vinyl covering used on some units can be cleaned with a damp cloth or ammonia based household cleaner if necessary. Disconnect the unit from the power supply before cleaning.
16. Care should be taken so that objects do not fall and liquids are not spilled into the unit through any ventilation holes or openings. On no account place drinks on the unit.
17. A qualified service technician should check the unit if:
 - The power cord has been damaged
 - Anything has fallen or spilled into the unit
 - The unit does not appear to operate correctly
 - The unit has been dropped or the enclosure damaged.
18. The user should not attempt to service the equipment. All service work is done by a qualified service technician.
19. Exposure to extremely high noise levels may cause a permanent hearing gloss. Individuals vary considerably in susceptibility to noise induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposure.

	Duration Per Day In Hours	Sound Level dBA, slow response
8		90
6		92
4		95
3		97
2		100
1 ½		102
1		105
½		110
¼ or less		115

According to OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Ear plugs or protectors in the ear canals or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss if exposure exceeds the limits set forth above. To ensure against potentially dangerous exposure to high sound pressure levels it is recommended that all persons exposed to equipment capable of producing high sound pressure levels such as this amplification system be protected by hearing protectors while this unit is in operation.

SAVE THESE INSTRUCTIONS



Intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient to constitute a risk of electrical shock to persons



Intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product

CAUTION: Risk of electrical shock - DO NOT OPEN

CAUTION: To reduce the risk of electrical shock, do not remove the cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: To prevent electrical shock or fire hazard, do not expose this appliance to rain or moisture. Before using this appliance please read the operating instructions for further warnings



Este simbolo tiene el propósito de alertar al usuario de la presencia de "(voltaje) peligroso" que no tiene aislamiento dentro de la caja del producto que puede tener una magnitud suficiente como para constituir riesgo de corrientazo

Este simbolo tiene el propósito de alertar al usuario de la presencia de instrucciones importantes sobre la operación y mantenimiento en la literatura que viene con el producto

PRECAUCION: Riesgo de corrientazo - no abra

PRECAUCION: Para disminuir el riesgo de corrientazo, no abra la cubierta. No hay piezas adentro que el pueda reparar. Deje todo mantenimiento a los técnicos calificados

ADVERTENCIA: Para evitar corrientazos o peligro de incendio, no deje expuesto a la lluvia o humedad este aparato. Antes de usar este aparato, lea mas advertias en la guia de operacion



Ce symbole est utilisé pour indiquer à l'utilisateur de ce produit de tension non-isolée dangereuse pouvant être d'intensité suffisante pour constituer un risque de choc électrique.



Ce symbole est utilisé pour indiquer à l'utilisateur qu'il ou qu'elle trouvera d'importantes instructions sur l'utilisation et l'entretien (service) de l'appareil dans la littérature accompagnant le produit

ATTENTION: Risques de choc électrique - NE PAS OUVIR!

ATTENTION: Afin de réduire le risque de choc électrique, ne pas enlever le couvercle. Il ne se trouve à l'intérieur aucune pièce pouvant être réparée par l'utilisateur. Confier l'entretien à un personnel qualifié.

AVERTISSEMENT: Afin de prévenir les risques de décharge électrique ou de feu, n'exposez pas cet appareil à la pluie ou à l'humidité. Avant d'utiliser cet appareil, lisez les avertissements supplémentaires situés dans le guide.



Dieses Symbol soll den Anwender vor unsolzierten gefährlichen Spannungen innerhalb des Gehäuses warnen, die von ausreichender Stärke sind, um einen elektrischen Schlag verursachen zu können.



Dieses Symbol soll den Benutzer auf wichtige Instruktionen in der Bedienungsanleitung aufmerksam machen, die Handhabung und Wartung des Produkts betreffen.

VORSICHT: Risiko - Elektrischer Schlag! Nicht öffnen!

VORSICHT: Um das Risiko eines elektrischen Schlag zu vermeiden, nicht die Abdeckung entfernen. Es befinden sich keine Teile darin, die vom Anwender repariert werden könnten. Reparaturen nur von qualifiziertem Fachpersonal durchführen lassen

ACHTUNG Um einen elektrischen Schlag oder Feuergefahr zu vermeiden, sollte dieses Gerät nicht dem Regen oder Feuchtigkeit ausgesetzt werden. Vor Inbetriebnahme unbedingt die Bedienungsanleitung lesen.

BEFORE SWITCHING ON

After unpacking your amplifier check that it is factory fitted with a three pin 'grounded' (or earthed) plug. Before plugging into the power supply ensure you are connecting to a grounded earth outlet.

If you should wish to change the factory fitted plug yourself, ensure that the wiring convention applicable to the country where the amplifier is to be used is strictly conformed to. As an example in the United Kingdom the cable colour code for connections are as follows.

EARTH OR GROUND - GREEN/YELLOW
NEUTRAL - BLUE
LIVE - BROWN



NOTE

This manual has been written for easy access of information. The front and rear panels are graphically illustrated, with each control and feature numbered. For a description of the function of each control feature, simply check the number with the explanations adjacent to each panel.

Your Laney amplifier has undergone a thorough two stage, pre-delivery inspection, involving actual play testing.

When you first receive your Laney AudioHub amplifier, follow these simple procedures:

- (i) Ensure that the amplifier is the correct voltage for the country it is to be used in.
- ii) Connect your instrument with a high quality shielded instrument cable. You have probably spent considerable money on your amplifier and guitar - don't use poor quality cable it won't do your gear justice.

Please retain your original carton and packaging so in the unlikely event that some time in the future your amplifier should require servicing you will be able to return it to your dealer securely packed.

Care of your Laney amplifier will prolong it's life....and yours!

Dear Player,

Thank you very much for purchasing your new Laney product and becoming part of the worldwide Laney family. Each and every Laney unit is designed and built with the utmost attention to care and detail, so I trust yours will give you many years of enjoyment.

Laney products have a heritage which stretches back to 1967 when I first began building valve amplifiers in my parent's garage. Since then we have moved on from strength to strength developing an extensive range of guitar, bass, public address and keyboard amplification products along with a list of Laney endorsees that includes some of the world's most famous and respected musicians. At the same time we believe we have not lost sight of the reason Laney was founded in the first place - a dedication to building great sounding amplification for working musicians.

Warm Regards,



Lyndon Laney CEO



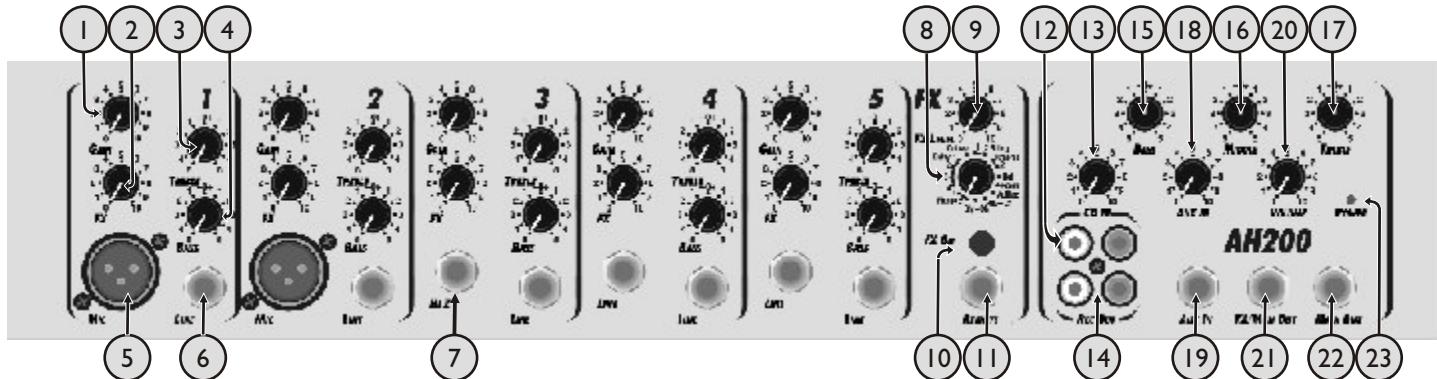
INTRODUCTION

The AH200 is a compact 165W PA Workstation combo in a kickback style cabinet with a reflex loaded 15" loudspeaker + a high frequency horn. Here at Laney we have dubbed it an AudioHUB. It features five separate channels, a built in 24bit digital FX processor, footswitch option, Record out allowing you to connect to a PA or recording device. Channels 1+2 have Mic and Line in sockets, a 2 band EQ and assignable effects level control. Channels 3-5 feature dual Line in sockets. There is a 3 band EQ in the master section along with Aux and CD in sockets and a main out, finally a power amp distortion limiter is built in to keep things nice and clean.

An explanation of these features follows on pages 6-8.

Definitions of Audio: A term used to describe sounds within the range of human hearing (20 Hz to 20 kHz) Also used to describe devices which are designed to operate within this range.

Definition of Hub: Definition of hub: Hub is a place of convergence where data arrives from one or more directions and is forwarded out in one or more other directions.



FRONT PANEL CONTROLS

- 1 This gain control allows you to adjust the audio level of instruments connected to the Channel 1 Mic and Line In sockets.
- 2 The FX level control determines the amount of signal from this channel sent to the onboard DSP module and FX/Mon out ^⑩
- 3 High/Treble frequencies can be boosted or cut by this control for this particular channel. Sources that fall in this range are cymbals, soprano vocals and keys above top C on a keyboard.
- 4 Low/Bass frequencies can be boosted or cut by this control for this particular channel. Sources that fall in this range are bass guitar, kick drums, deep vocals and keys below middle C on a keyboard.
- 5 The Mic input is designed for low impedance microphones (200-600ohms), it is a balanced XLR so will work equally well with microphones that are balanced or unbalanced. Level controlled by ^⑪
- 6 The Line In socket is designed for line level signals such as those obtained from keyboards, sound modules and sounds cards. Level controlled by ^⑪ (Both mic and line in sockets may be used at the same time.)
- 7 The High Impedance input is designed to accept many different types of instrument, and is particularly suited for instruments such as acoustic guitars with piezo pickup systems.

- 8 The onboard digital effects have been custom designed by Laney to complement the AH200 with a choice of delays, flange, Rotary, Octave Down, Chorus, Reverb and combinations of these. Select the chosen effect here and then control the overall level with ⑨ and each channels individual level with ⑩
- 9 Sets the overall master level for the onboard effects section.
- 10 Enables the onboard digital effects processor. To allow remote switching of the effects, this switch must be switched in.
- 11 This socket is for the connection of a Laney FSI mono footswitch, to remotely switch the effects section on and off.
- 12 RCA Phono socket input for the connection of line level equipment like CD/MP3 Players etc. The level is controlled by ⑬
- 13 Adjusts the input level of equipment connected to the CD input sockets ⑫
- 14 RCA Phono socket output that is post EQ and pre master volume for the connection to an external recording device, PA system etc.
- 15 This is the master Bass control and affects the main mixed signal (ie. all channels)
- 16 This is the master Middle control and affects the main mixed signal (ie. all channels)
- 17 This is the master Treble control and affects the main mixed signal (ie. all channels)
- 18 Controls the input level through the Aux in socket ⑯
- 19 The Aux in socket allows you connect an external device such as the output from an effects processor or sub mixer. The level is controlled by ⑯
- 20 Controls the overall sound level from the amplifier and to the main out socket ⑰
- 21 The FX/mon out socket contains the main FX bus signal prior to being routed to the internal effects processor. You can use this to route to an external FX processor/PA System/Monitors instead if you wish. The level is channel dependent.
- 22 The main out socket contains the final mixed signal post master volume and prior to routing to the internal amplifier. Use it for driving external power amplifiers etc.
- 23 Indicates that power is on and the unit active. **(Always switch off and disconnect power cord when not in use)**

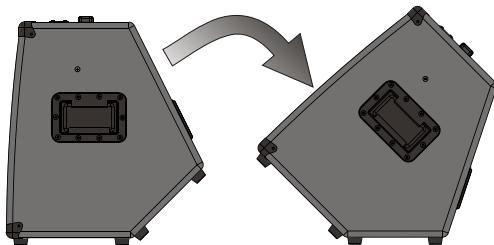


FRONT PANEL CONTROLS

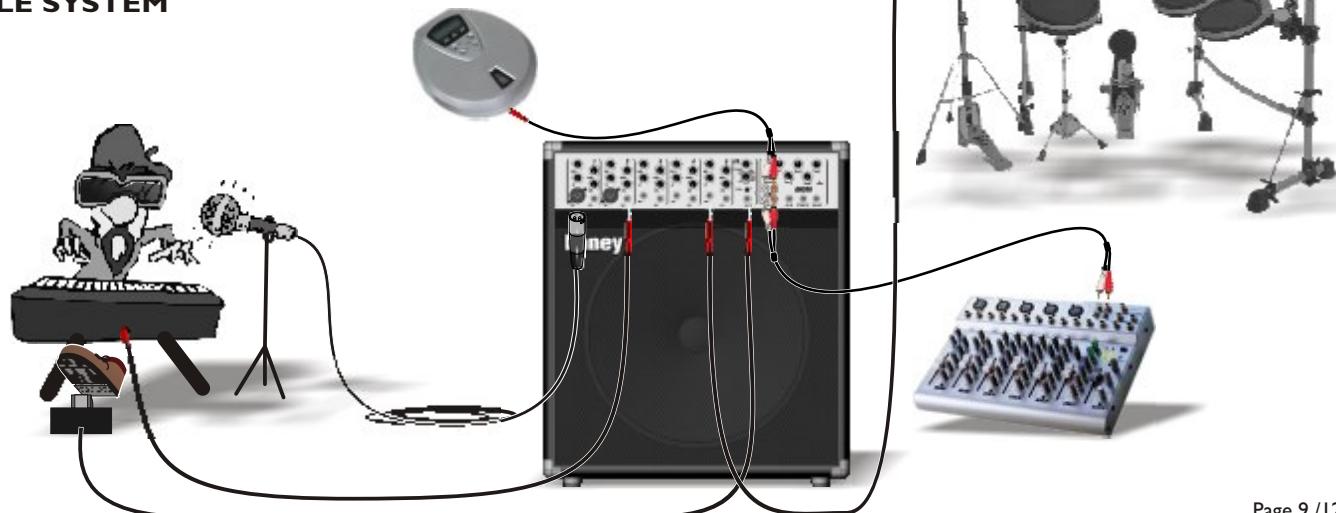
- 1 Power inlet socket. Connect to your power source. Make sure the specified voltage is correct for your country!
- 2 This drawer contains the main safety fuse for the unit.
USE ONLY THE CORRECT SIZE AND RATING OF FUSE AS SPECIFIED ON THE PANEL.
The mains fuse ratings are detailed in the specs section at the rear of this manual.
- 3 The main power switch for the unit.
- 4 Serial Number and model of your unit.
- 5 This socket(s) should be used to connect an extension-cabinet. One socket is already used to connect to the internal loudspeaker, you may use the free socket to connect to an external speaker cabinet if you wish. The impedance of the extension cabinet must not be less than 8 Ohms. Connecting cabinets that have a lower impedance than 8 Ohms will result in the amplifier overheating. Continual use in this manner may cause permanent damage. Connecting a cabinet with an impedance of greater than 8 Ohms will cause no damage to the amplifier but will result in a reduced output level. You may disconnect the internal loudspeaker, in this case the total impedance connected must not be less than 4 Ohms. eg two 8 Ohm cabinets.

OTHER FEATURES

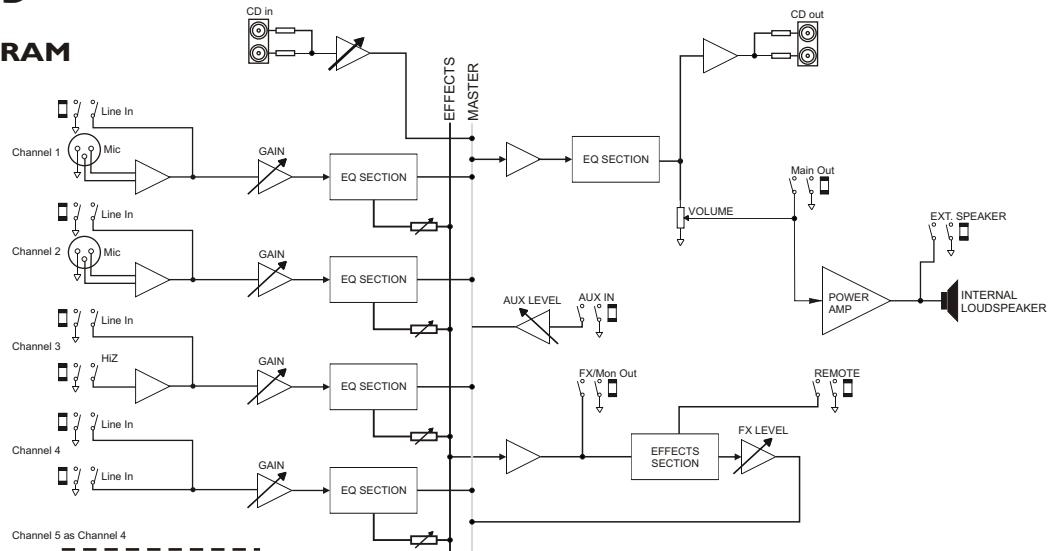
Your AH200 features a kick style design to enable you to use it as a stage monitor, or a conventional straight combo.



SAMPLE SYSTEM



BLOCK DIAGRAM



General Notes

Amplifier connection: In order to avoid damage, it is advisable to establish and follow a pattern for turning on and off your equipment. With all system parts connected, turn on source equipment, tape decks, cd players, mixers, effects processors etc. BEFORE turning on your AUDIOHUB. Many products have large transient surges at turn on and off which can cause damage to your speakers. By turning on your AUDIOHUB LAST and making sure its Volume control is set to minimum any transients from other equipment will not reach your loudspeakers. Wait until all system parts have stabilised; usually a couple of seconds. Similarly when turning off your system always turn down the Volume control on your AUDIOHUB and then turn off its power before turning off other equipment.

Caution: These professional loudspeaker systems are capable of generating very high sound pressure levels. Use care with placement and operation to avoid exposure to excessive levels that can cause permanent hearing damage. (Refer to guidelines on page 2)

Servicing: The user should not attempt to service these products. Refer all servicing to qualified service personnel.

SPECIFICATIONS

Supply Voltage	~100V, ~120V, ~220V, ~230V, ~240V 50/60Hz Factory Option	
Mains Fuse	~220V>~240V = T2A L. ~100>~120V = T5A L (Time delay)	
Power Consumption	300W	
Output Power	165W	
THD%N	<0.03%	
Channel 1+2 Inputs	Microphone	2K input impedance, -30dBu Nominal input level
	Line In	10K Input impedance, -15dBu nominal input level
Channel 3 Inputs	Hi Z Line In	470k input impedance, -30dBu nominal input level
	Line In	10K Input impedance, -15dBu nominal input level
Channel 4+5 Inputs	2*Line In	10K Input impedance, -15dBu nominal input level
CD In	Dual RCA Phono	22K input impedance, -10dBu Nominal input level
Channel EQ's	Bass	(±15dBu at 60 Hz) (Shelving)
	Treble	(±15dBu at 10 KHz) (Shelving)
Master EQ	Bass	(±15dBu at 60 Hz) (Shelving)
	Mid	(±15dBu at 2 KHz) (Shelving)
	Treble	(±15dBu at 10 KHz) (Shelving)
Effects	Yes	Independently assignable to channel 1-5, master FX level control. Remotely switchable. 4*Delay, Octave, 2*Rotary, 2*Chorus, 2 * reverbs, multitap delay, 2 * flange, Delay + Chorus, Reverb + Chorus.
Ext Loudspeaker	Yes	(Minimum impedance 8 ohms)
Internal loudspeaker	15" Custom Designed + high frequency horn	
Main out	Yes	(+4dBu Nominal Level)
Aux In	Yes	(-10dBu Nominal Level)
Size	580*505*460	(H*W*D)
Unit weight	27.5 Kg	
Packing weight	29.4 Kg	

This product conforms to:

European EMC directive (2004/108/EC), Low Voltage Directive (72/23/EEC) and CE mark Directive (93/68/EEC)

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In the interest of continued product development, Laney reserves the right to amend product specification without prior notification.